

WHAT IS CLAIMED IS:

- 1 1. A panel for use in an assembly having a mounted component, the
2 panel comprising:
 - 3 a substrate having an aperture extending through the substrate
4 and a first capping portion at least partially about the aperture, wherein the
5 aperture is configured to receive the mounted component;
 - 6 a skin having a second capping portion at least partially about the
7 aperture; and
 - 8 at least one compressible layer between the substrate and the
9 skin, wherein the first capping portion and second capping portion
10 cooperatively engage one another to close off the at least one compressible
11 layer between the substrate and the skin.
- 1 2. The panel of claim 1, including at least one boss coupled to and
2 extending from the substrate opposite the skin, wherein the at least one boss
3 is configured to mount the mounted component to the substrate.
- 1 3. The panel of claim 1, wherein the mounted component comprises
2 a handle and wherein the aperture is configured to receive the handle.
- 1 4. The panel of claim 1, wherein the at least one compressible layer
2 includes a foam layer injection molded between the substrate and the skin.
- 1 5. The panel of claim 1, wherein one of the first capping portion and
2 the second capping portion includes a channel and wherein the other of the
3 first capping portion and the second capping portion includes an end received
4 within the channel.
- 1 6. The panel of claim 5, wherein the channel extends completely
2 about the aperture.

1 7. The panel of claim 1, wherein the second capping portion has a
2 first thickness and wherein a remainder of the skin has a second lesser
3 thickness.

1 8. The panel of claim 1, wherein one of the first capping portion and
2 the second capping portion includes a detent and wherein the other of the first
3 capping portion and the second capping portion includes a detent-engaging
4 portion.

1 9. The panel of claim 1, wherein the first capping portion and the
2 second capping portion at least partially overlap one another between the
3 substrate and the skin.

1 10. An assembly comprising:
2 a substrate having an aperture extending through the substrate;
3 and a first capping portion at least partially about the aperture;
4 a skin having a second capping portion;
5 at least one layer between the substrate and the skin, wherein the
6 first capping portion and second capping portion cooperatively engage one
7 another to close off the at least one compressible layer between the substrate
8 and the skin; and
9 a component extending through the aperture.

1 11. The assembly of claim 10, wherein the component is mounted to
2 the substrate.

1 12. The assembly of claim 10 including at least one boss coupled to
2 and extending from the substrate opposite the skin, wherein the component is
3 mounted to the at least one boss.

1 13. The assembly of claim 10, wherein the component comprises a
2 handle.

1 14. The assembly of claim 10, wherein the at least one compressible
2 layer includes a foam layer injection molded between the substrate and the
3 skin.

1 15. The assembly of claim 10, wherein the first capping portion and
2 the second capping portion at least partially overlap one another between the
3 substrate and the skin.

1 16. A vehicle door assembly comprising:
2 a substrate having an aperture extending through the substrate;
3 a handle extending through the aperture and having a portion
4 opposite the substrate; and
5 a compressible surface coupled to the substrate and extending in
6 close proximity to the aperture between the substrate and the portion of the
7 handle opposite the substrate.

1 17. The assembly of claim 16 including at least one boss coupled to
2 and extending from the substrate, wherein the handle is mounted to the at
3 least one boss.

1 18. The assembly of claim 16 including:
2 a skin; and
3 at least one compressible layer between the substrate and the
4 skin.

1 19. The assembly of claim 18, wherein the substrate includes a first
2 capping portion at least partially about the aperture, wherein the skin has a
3 second capping portion cooperatively engaging the first capping portion to
4 close off the at least one compressible layer between the substrate and the
5 skin.

1 20. The assembly of claim 18, wherein the at least one compressible
2 layer includes a foam layer injection molded between the substrate and the
3 skin.

1 21. A method for manufacturing a panel for use with an assembly
2 having a mounted component, the method comprising:

3 providing a substrate having an aperture extending through the
4 substrate and having a first capping portion extending at least partially about
5 the aperture;

6 providing a skin having a second capping portion extending at
7 least partially about the aperture;

8 cooperatively engaging the first capping portion and the second
9 capping portion so as to close off a space between the skin and the substrate;
10 and

11 injection molding a foam material into the space between the skin
12 and the substrate.

1 22. A method for manufacturing a vehicle door assembly, the method
2 comprising:

3 providing a substrate having an aperture extending through the
4 substrate and having a first capping portion extending at least partially about
5 the aperture;

6 providing a skin having a second capping portion extending at
7 least partially about the aperture;

8 cooperatively engaging the first capping portion and the second
9 capping portion so as to close off a space between the skin and the substrate;
10 and;

11 injection molding a foam material into the spaces between the
12 skin and the substrate; and

13 positioning at least a portion of a door handle within the aperture.

1 23. The method of claim 22 including mounting the door handle to the
2 substrate.